

IN THE CLAIMS:

Claims 1-41 have been amended herein. All of the pending claims 1 through 41 are presented below. This listing of claims will replace all prior versions and listings in the application. Please enter these claims as amended.

1. (Currently Amended) A plasma reactor, comprising each openly:  
first, second and third power generators coupled to one of upper and lower electrodes; and  
a controller for selectively activating ~~said the~~ first, second and third power generators.
2. (Currently Amended) The plasma reactor of claim 1 wherein ~~said the~~ first power generator is coupled to ~~said the~~ upper electrode and ~~said the~~ second and third power generators are coupled to ~~said the~~ lower electrode.
3. (Currently Amended) The plasma reactor of claim 2 wherein ~~said the~~ second power generator is configured to operate at a frequency of at least three times an operational frequency of ~~said the~~ third power generator.
4. (Currently Amended) The plasma reactor of claim 2 wherein ~~said the~~ first power generator is configured to operate at a frequency of at least greater than or equal to each of ~~a~~ an operational frequency of ~~said the~~ second power generator and ~~a~~ an operational frequency of ~~said the~~ third power generator.
5. (Currently Amended) The plasma reactor of claim 2 wherein ~~said the~~ controller is operable to place ~~said the~~ first power generator in an inactive mode and ~~said the~~ second and third power generators in an active mode.

6. (Currently Amended) The plasma reactor of claim 2 wherein ~~said~~ the controller is operable to place ~~said~~ the first and third power generators in an active mode and ~~said~~ the second power generator in an inactive mode.

7. (Currently Amended) The plasma reactor of claim 2 wherein ~~said~~ the controller is operable to place ~~said~~ the first and second power generators in an active mode and ~~said~~ the third power generator in an inactive mode.

8. (Currently Amended) The plasma reactor of claim 2 wherein ~~said~~ the controller is operable to place ~~said~~ the first, second and third power generators in an active mode.

9. (Currently Amended) The plasma reactor of claim 2 wherein ~~said~~ the controller during a process is operable to configure ~~said~~ the first, second and third power generators to a first activation configuration during a first phase thereof and to reconfigure ~~said~~ the first, second and third power generators to a second activation configuration during a second phase thereof.

10. (Currently Amended) The plasma reactor of claim 2 wherein ~~said~~ the controller is operable to configure ~~said~~ the first, second and third power generators to a plurality of activation configurations during a corresponding plurality of phases of a duty cycle of a process.

11. (Currently Amended) The plasma reactor of claim ~~10~~, 10 wherein ~~said~~ the controller is further operable to control power levels of ~~said~~ the first, second and third power generators during ~~said~~ the plurality of activation configurations.

12. (Currently Amended) The plasma reactor of claim 1 wherein each of ~~said~~ the first, second and third power generators is ~~capacitively~~ capacitively coupled to one of ~~said~~ the upper and lower electrodes.

13. (Currently Amended) The plasma reactor of claim 1 wherein ~~said~~ the second power generator operates at a frequency of about 13.5 MHz to about 60 MHz.

14. (Currently Amended) The plasma reactor of claim 1 wherein ~~said~~ the first power generator operates at a frequency of about 40 MHz to about 100 MHz.

15. (Currently Amended) The plasma reactor of claim 1 wherein ~~said~~ the third power generator operates at a frequency of about 1 MHz to about 13.5 MHz.

16. (Currently Amended) A plasma reactor, comprising:  
a vacuum chamber including upper and ~~each~~ lower electrodes therein;  
first, second and third power generators respectively operably ~~coupled~~ coupled to one of ~~to said~~ the upper and lower electrodes; and  
a controller for selectively activating ~~said~~ the first, second and third power generators.

17. (Currently Amended) The plasma reactor of claim 16 further comprising a wafer table, wherein ~~said~~ the lower electrode is coupled to ~~said~~ the wafer table and ~~said~~ the upper ~~electrode~~ electrode is arranged above ~~said~~ the wafer table.

18. (Currently Amended) The plasma reactor of claim 16 wherein each of ~~said~~ the first, second and third power generators is ~~capacitively~~ capacitively coupled to one of the upper and lower electrodes.

19. (Currently Amended) The plasma reactor of claim 16 wherein ~~said~~ the first power generator is ~~capacitively~~ capacitively coupled to ~~said~~ the upper electrode and ~~said~~ the second and third power generators are ~~capacitively~~ capacitively coupled to ~~said~~ the lower electrode.

20. (Currently Amended) The plasma reactor of claim 19 wherein ~~said~~ the second power generator is configured to operate at a frequency of at least three times a frequency of ~~said~~ the third power generator.

21. (Currently Amended) The plasma reactor of claim 20 wherein ~~said~~ the second power generator is configured to operate at a frequency of about 13.5 MHz to about 60 MHz.

22. (Currently Amended) The plasma reactor of claim 20 wherein ~~said~~ the first power generator is configured to operate at a frequency of about 40 MHz to about 100 MHz.

23. (Currently Amended) The plasma reactor of claim 20 wherein ~~said~~ the third power generator is configured to operate at a frequency of about 1 MHz to about 13.5 MHz.

24. (Currently Amended) The plasma reactor of claim 16 wherein ~~said~~ the controller is operable to place ~~said~~ the first, second and third power generators in a plurality of activation configurations during a corresponding plurality of phases of a duty cycle of a process.

25. (Currently Amended) A method of generating a plasma in a plasma reactor, including a vacuum chamber containing a gas and first, second and third electrodes therein operably coupled to respective first, second and third power generators, ~~The~~ the method comprising:  
configuring ~~said~~ the first, second and third power generators to a first activation configuration during a first phase of ~~said~~ an etch process; and  
reconfiguring ~~said~~ the first, second and third power generators to at least a second activation configuration during at least a second phase of ~~said~~ the etch process.

26. (Currently Amended) The method of claim 25 wherein ~~said~~ configuring comprises activating ~~said the~~ first and third power generators and deactivating ~~said the~~ second power generator during ~~said the~~ first phase of ~~said the~~ etch process.

27. (Currently Amended) The method of claim 26 wherein ~~said~~ reconfiguring comprises activating ~~said the~~ second and third power generators and deactivating ~~said the~~ first power generator during ~~said at least the~~ second phase of ~~said the~~ etch process.

28. (Currently Amended) The method of claim 25 further comprising reconfiguring ~~said the~~ first, second and third power generators to a third activation configuration during a third phase of ~~said the~~ etch process.

29. (Currently Amended) A method of etching a semiconductor wafer in a plasma reactor, comprising:  
generating first, second and third power signals at upper and lower electrodes ~~further~~ respectively coupled to first, second and third power generators; and  
individually activating ~~said the~~ first, second and third power generators to control ~~said the~~ etching of ~~said the~~ semiconductor wafer.

30. (Currently Amended) The method of claim 29 wherein individually activating comprises activating ~~said the~~ second and third power generators and deactivating ~~said the~~ first power generator.

31. (Currently Amended) The method of claim 29 wherein individually activating comprises activating ~~said the~~ first and third power generators and deactivating ~~said the~~ second power generator.

32. (Currently Amended) The method of claim 29 wherein individually activating comprises activating ~~said~~ the first and second power generators and deactivating ~~said~~ the third power generator.

33. (Currently Amended) The method of claim 29 wherein individually activating comprises activating ~~said~~ the first, second and third power generators.

34. (Currently Amended) The method of claim 29 wherein ~~said~~ individually activating comprises:  
configuring ~~said~~ the first, second and third power generators to a first activation configuration during a first phase of ~~said~~ the etching ~~said~~ of the semiconductor wafer; and  
reconfiguring ~~said~~ the first, second and third power generators to at least a second activation configuration during at least a second phase of ~~said~~ the etching ~~said~~ of the semiconductor wafer.

35. (Currently Amended) The method of claim 29 wherein individually activating comprises configuring ~~said~~ the first, second and third power generators to a plurality of activation configurations during a corresponding plurality of phases of a duty cycle of ~~said~~ the etching ~~said~~ of the semiconductor wafer.

36. (Currently Amended) The method of claim 29 further comprising independently varying power levels of ~~said~~ the first, second and third power generators during ~~said~~ the etching ~~said~~ of the semiconductor wafer.

37. (Currently Amended) A method for etching a semiconductor wafer, comprising:  
providing a plasma reactor, including:  
first, second and third power generators coupled to upper and lower electrodes; and  
a controller for selectively activating ~~said~~ the first, second and third power generators; and

controlling ~~said the~~ first, second and third power generators with ~~said the~~ controller to control ~~said the~~ etching of ~~said the~~ semiconductor wafer.

38. (Currently Amended) The method of claim 37 wherein controlling comprises individually activating in a first configuration at least one of ~~said the~~ first, second and third power generators during at least one phase of ~~said the~~ etching ~~said of the~~ semiconductor wafer.

39. (Currently Amended) The method of claim 38 further comprising individually activating in a second configuration at least one of ~~said the~~ first, second and third power generators during at least another phase of ~~said the~~ etching ~~said of the~~ semiconductor wafer.

40. (Currently Amended) The method of claim 36 wherein independently varying further includes varying ~~each power generator the power levels~~ level of each of the first, second, and third power generators to produce a desired via profile.

41. (Currently Amended) A plasma reactor, comprising:  
first, second and third power generators each operably coupled to one of upper and lower electrodes; and  
a controller operably coupled to each of ~~said the~~ first, second and third power generators, ~~said the~~ controller further configured to selectively activate ~~said the~~ first, second and third power generators in accordance with a variable duty cycle including at least first and second phases.